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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/927,663	08/10/2001	Richard L. Simmons	56964US002	6518

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EXAMINER

PRASAD, CHANDRIKA

ART UNIT	PAPER NUMBER
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2839

DATE MAILED: 09/11/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/927,663

Applicant(s)

SIMMONS ET AL.

Examiner

Chandrika Prasad

Art Unit

2839

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 July 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 12,13,14.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. The reply filed on 7/15/03 consists of amendment to the specification, changes in drawings and remarks related to rejection of claims. The claims are not allowable as explained below.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-2, 14, 15, 17-18 and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Knudson.

Knudson (Figures 1-6) discloses a body 26 made of polymeric material having an input end with a plurality of input openings in a first ordered arrangement, an output end with a plurality of openings in a second ordered arrangement different that the first ordered arrangement and a plurality of isolated non-linear passageways (tubes) between the input and output openings for receiving a plurality of optical fibers 42. The body can be made of unitary construction as shown in Figure 6 or by stacking a plurality of plates with groove as shown in Figures 2-4. Knudson further discloses alignment means 66, 68 as well as the use of injection molding to form the body.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2839

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Knudson.

Knudson shows all the features of this claim as described in Paragraph 3 above except voids in the body to save material. Such a feature is considered common knowledge. It would have been obvious to one having ordinary skill in the art at the time of the instant invention to make the Knudson's body with voids because this would provide a means to save material as is common knowledge.

6. Claims 4-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Knudson in view of Applicant's admitted prior art (AAPA).

Knudson shows all the features of these claims as described in Paragraph 3 above except the material of the unitary body to be a metal and the use of an additive manufacturing process. AAPA (Page 9, lines 13-16) shows the use of polymers or metals for unitary bodies (housings) for optical fiber components to be well known. It would have been obvious to one having ordinary skill in the art at the time of the instant invention to make the Knudson's unitary body of metal as shown by AAPA because it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416.

AAPA (Page 10, lines 3-29) also shows the use of additive manufacturing process to be well known. It would have been obvious to one having ordinary skill in the art at the time of the instant invention to make the Knudson unitary body by an additive manufacturing

Art Unit: 2839

process because this provides a well-known process to make a three-dimensional unitary body.

7. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Knudson in view of Chen et al.

Knudson shows all the features of this claim as described in Paragraph 3 above except the use of abrasive laden slurry polishing. Chen discloses the use of abrasive laden slurry for polishing optical waveguides (column 2, lines 32-39). It would have been obvious to one having ordinary skill in the art at the time of the instant invention to use abrasive laden slurry for polishing Knudson's passageways because this would provide a much smoother surface as taught by Chen.

8. Claims 7- 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Knudson in view of Shahid.

Knudson shows all the features of this claim as described in Paragraph 3 above except a cable with strain relief, connector at the input or output, a housing to enclose the body and plug-in card to make a shuffle mounted in a rack. Official notice is given that these features are well known in the art of optical fiber connectors. It would have been obvious to one having ordinary skill in the art at the time of the instant invention to provide these features to the Knudson's body because these would provide means to connect the body to a plurality of other devices, strain relief and protection from the outside environment.

9. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Knudson in view of Engstrand et al.

Knudson shows all the features of this claim as described in Paragraph 3 above except two channels intersecting on at least one plate. The instant invention does not

Art Unit: 2839

provide any reasons or specific problem to be solved by such an arrangement. Engstrand (Figures 1-3) shows such an arrangement of channels on a plate. It would have been obvious to one having ordinary skill in the art at the time of the instant invention to arrange the Knudson's channels in a configuration as shown by Engstrand because this would provide a further shuffling of the passageways if so desired.

10. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Knudson in view of Tanguay, Jr. et al.

Knudson shows all the features of this claim as described in Paragraph 3 above except the use of milling for making channels. Tanguay discloses the use of milling for making channels 12 in a substrate 14. It would have been obvious to one having ordinary skill in the art at the time of the instant invention to use milling for forming channels in the Knudson's plates because this is a well known process for forming grooves, recesses, channels, etc.

11. Claims 21, 23 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Knudson in view of Bylander et al.

Knudson shows all the features of these claims as described in Paragraph 3 above except the end plates with plurality of openings. The instant invention does not provide any reasons or specific problems to be solved by the end plates. Bylander (Figure 2) shows end plates 36 on two sides of a body in the center. It would have been obvious to one having ordinary skill in the art at the time of the instant invention to provide such a feature to Knudson's body because this would provide a means to support and provide strain relief to the optical fibers as shown by Bylander.

Art Unit: 2839

12. Claim 22 is rejected under 35 U.S.C. 102(e) as being anticipated by Knudson and Bylander et al.

Knudson and Bylander show all the features of this claim as described in Paragraph 11 above except the body with the tubes flexible. Flexible materials are well known in the art of optical fibers. It would have been obvious to one having ordinary skill in the art at the time of the instant invention to make the body of a flexible material because it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416.

13. Claim 25 is rejected under 35 U.S.C. 102(e) as being anticipated by Knudson and Bylander et al. in view of Hutton et al.

Knudson and Bylander show all the features of this claim as described in Paragraph 11 above except the use of color-coding. Color-coding is general knowledge. Hutton discloses the use of color-coding for optical fibers. It would have been obvious to one having ordinary skill in the art at the time of the instant invention to color-code the Knudson's tubes because this would provide a means to identify the individual tubes.

Response to Arguments

14. Applicant's arguments with respect to claims 1-25 have been considered but are moot in view of the new ground(s) of rejection.

Double Patenting

15. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29

Art Unit: 2839

USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

16. Claims 1, 14 and 21 are provisionally rejected under the judicially created doctrine of double patenting over claims 1 and 2 of copending Application No. 10/161,800. This is a provisional double patenting rejection since the conflicting claims have not yet been patented.

The subject matter claimed in the instant application is fully disclosed in the referenced copending application and would be covered by any patent granted on that copending application since the referenced copending application and the instant application are claiming common subject matter.

Furthermore, there is no apparent reason why applicant would be prevented from presenting claims corresponding to those of the instant application in the other copending application. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

Contact Information

17. Any correspondence to this action may be mailed to:

**Commissioner for Patents
Post Office Box 1450
Alexandria, VA 22313-1450**

Art Unit: 2839

Hand-delivered responses should be brought to:

Crystal Plaza 4, Fourth Floor (receptionist)

2201 South Clark Place, Arlington, Virginia

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chandrika Prasad whose telephone number is (703) 308-0977.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynn Feild, can be reached at (703) 308-2710. The fax number for this Group is (703) 872-9318 (general) and (703) 872-9319 for after-final.

Any inquiry of a general nature or relating to the status of this application or processing should be directed to the Group receptionist whose telephone number is (703) 308-1782.



Chandrika Prasad
Patent examiner
August 25, 2003